

CLAIMS

What is claimed is:

1. An optical connector adapter mount for mounting optical connectors to a panel, the mount comprising:

a frame with a mounting section for attaching the mount to the panel, and a housing section with an aperture adapted for connecting at least one multi-fiber optical connector with at least a row of multiple optical fibers to the housing section;

wherein the aperture in the housing has an axis of symmetry which is slanted relative to the mounting section, and wherein the axis of symmetry of the aperture is angled relative to a normal axis of the panel when the mounting section is mounted to the panel and the at least one connector connected to the housing section is oriented with the row of multiple optical fibers aligned generally vertically.

2. The mount as in Claim 1, wherein the housing section extends through a hole in the panel when the mounting section is mounted to the panel.

3. The mount as in Claim 2, wherein the aperture extends at least in part through the hole in the panel when the mounting section is mounted to the panel.

4. The mount as in Claim 1, wherein the at least one connector is an MPO connector or an MTP connector.

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5. The mount as in Claim 1, wherein the aperture extends through the housing section, and the housing section is slanted relative to the mounting section.

6. The mount as in Claim 1, further comprising an EMI gasket connected to the mounting section.

7. The mount as in Claim 7, wherein the EMI gasket surrounds the housing section, and wherein the EMI gasket is sandwiched between the mounting section and panel when the mounting section is mounted on the panel.

8. An optical connector adapter mounting system comprising the optical connector adapter mount in Claim 1 and a twist boot for supporting the row of multiple optical fibers extending from the at least one connector when the at least one connector is connected to the housing section.

9. An optical connector adapter mount for mounting optical connectors to a panel, the mount comprising:

a mounting section for attaching the mount to the panel; and

a tubular housing section connected to the mounting section, the tubular housing section having an aperture for connecting a multi-fiber optical connector to one end of the housing section;

wherein the housing section is slanted relative to the mounting section, and when the mounting section is mounted to the panel the connector connected to the housing section is angled relative to a normal axis of the panel and a

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row of optical fibers extending from the connector has a generally twisted shape.

10. The mount as in Claim 9, wherein the row of optical fibers is substantially aligned along a first axis at a first location and is substantially aligned along a second axis at a second location, the second axis crossing over the first axis.

11. The mount as in Claim 9, wherein when the mounting section is mounted to the panel the housing section extends at least in part through a hole in the panel.

12. The mount as in Claim 11, wherein the connector is connected to the housing section extends through the hole in the panel.

13. The mount as in Claim 9, wherein the row of optical fibers extending from the connector are disposed in a twist boot, and wherein the twist boot supports the row of optical fibers providing the row of optical fibers the generally twisted shape.

14. The mount as in Claim 13, wherein the twist boot is flexible.

15. The mount as in Claim 14, wherein the twist boot has a curved portion and a straight portion, the row of optical fibers being curved by the curved portion of the twist boot.

16. The mount as in Claim 15, wherein the twist boot provides the row of optical fibers with predetermined curvature and twist.

17. The mount as in Claim 9 further comprising an EMI gasket connected to the mounting section.

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18. The mount as in Claim 9, wherein the connector is at least one of an MPO connector or an MTP connector.

19. An optical connector mounting system comprising:

an adapter mount with a mounting section for mounting the adapter mount to a panel, and a housing section depending from the mounting section;

an adapter located in the housing section for coupling with a multi optical fiber connector; and

a boot connected to the connector, the boot positioning a row of optical fibers terminated at the connector along a length of the optical fibers, wherein when the connector is coupled to the adapter the boot positions the row of optical fibers so that the row of optical fibers along said length has a predetermined shape.

20. The system as in Claim 19, wherein the connector is connected to the adapter in a vertical orientation with the row of optical fibers at the connector being aligned with a vertical axis, and wherein the predetermined shape of the row of optical fibers provided by the boot allows connection of the connector to the adapter in the vertical orientation.

21. The system as in Claim 19, wherein the boot is a flexible boot.

22. The system as in Claim 21, wherein the row of optical fibers are encased in a cable0 having an unsymmetrical

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cross-section with a major side and a minor side, the row of optical fibers being disposed along the major side.

23. The system as in Claim 19, wherein the predetermined shape of the row of optical fibers is a generally twisted shape with the row of optical fibers being aligned with a first axis at the connector and with a second axis crossing over the first axis at another location along said length.

24. The system as in Claim 19, wherein the housing section has an aperture with a through axis slanted relative to the mounting section, the adapter being located in the aperture of the housing section and being generally aligned with the through axis.

25. The system as in Claim 24, wherein when the mount is mounted to the panel, the housing section extends through a hole in the panel and the through axis of the aperture in the housing section is angled relative to a center axis of the hole in the panel.

26. The system as in Claim 25, wherein when the connector is connected to the adapter, the connector extends through the panel at an angle relative to the center axis of the panel.

27. The system as in Claim 19, wherein the boot has a curved portion and a substantially straight portion, the row of optical fibers in the curved portion being curved and twisted.

28. The system as in Claim 19, further comprising an EMI gasket connected to the mount.

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29. An optical connector adapter assembly comprising:

a housing, the housing having a mounting section and a housing section with at least one passage extending through the housing for mating a pair of optical connectors to the housing; and

a pair of latch inserts located in the at least one passage of the housing section, at least one latch insert being adapted for locking a corresponding connector of the pair of connectors to the housing;

wherein the housing is a one-piece member, and the at least one passage in the housing section has a centerline axis which is slanted relative to the mounting section.

30. The adapter assembly as in Claim 29, wherein the at least one latch insert has a spring loaded projection, and the housing section has a detent formed therein, the spring loaded projection being biased into the detent to lock the at least one latch insert in the housing.

31. The adapter assembly as in Claim 29, wherein the at least one passage has a first guide channel for guiding insertion of the at least one latch insert into the at least one passage from a first end of the housing section.

32. The adapter assembly as in Claim 31, wherein the at least one passage has a second guide channel for guiding insertion of a second latch insert of the pair of latch inserts into the at least one passage from a second end of the housing section opposite the first end.

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33. The adapter assembly as in Claim 29, wherein the housing is made of metal.

34. The adapter assembly as in Claim 29, wherein the mounting section has a seating surface for seating the adapter assembly against a panel, the mounting section having a recess formed in the seating surface for receiving an EMI gasket therein, the recess in the mounting section surrounding the housing section.

35. The adapter assembly as in Claim 29, wherein the housing section is generally tubular, and is substantially aligned with the centerline axis of the at least one passage.

36. The adapter assembly as in Claim 29, further comprising a door pivotally mounted to the housing for covering an opening of the at least one passage at one end of the housing.

37. The adapter assembly as in Claim 36, wherein the door is spring loaded to bias the door to a closed position.

38. The adapter assembly as in Claim 29, wherein the connectors are MPO or MPT connectors.

39. An optical connector mounting system for mounting a pair of opposing optical connectors to a panel, the system comprising:

an outer adapter housing with a frame having a mounting section and a housing section, the mounting section being adapted for mounting the outer adapter housing to the panel, the housing section having a passage extending therethrough for receiving along a centerline axis of the

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passage the pair of opposing optical connectors; and

a pair of inner adapter housings located in the passage for locking the pair of opposing optical connectors in the passage;

wherein the housing section of the outer adapter is slanted relative to the mounting section, and wherein when the mounting section is mounted to the panel, the housing section of the outer adapter housing extends through a hole in the panel and the centerline axis is angled relative to another centerline axis of the hole in the panel.

40. The system as in Claim 39, further comprising an EMI gasket mounted to the outer adapter housing, wherein when the mounting section is mounted to the panel, the EMI gasket is sandwiched between the mounting section and the panel.

41. The system as in Claim 39, further comprising a door pivotally mounted to the outer adapter housing, the door being pivoted relative to the outer adapter housing between open and closed positions, wherein in the closed position the door covers one end of the passage.



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